Experiments

Service Design | 12th of April 2022

Florian Wille

Smalt

DESIRABILITY

VIABILITY
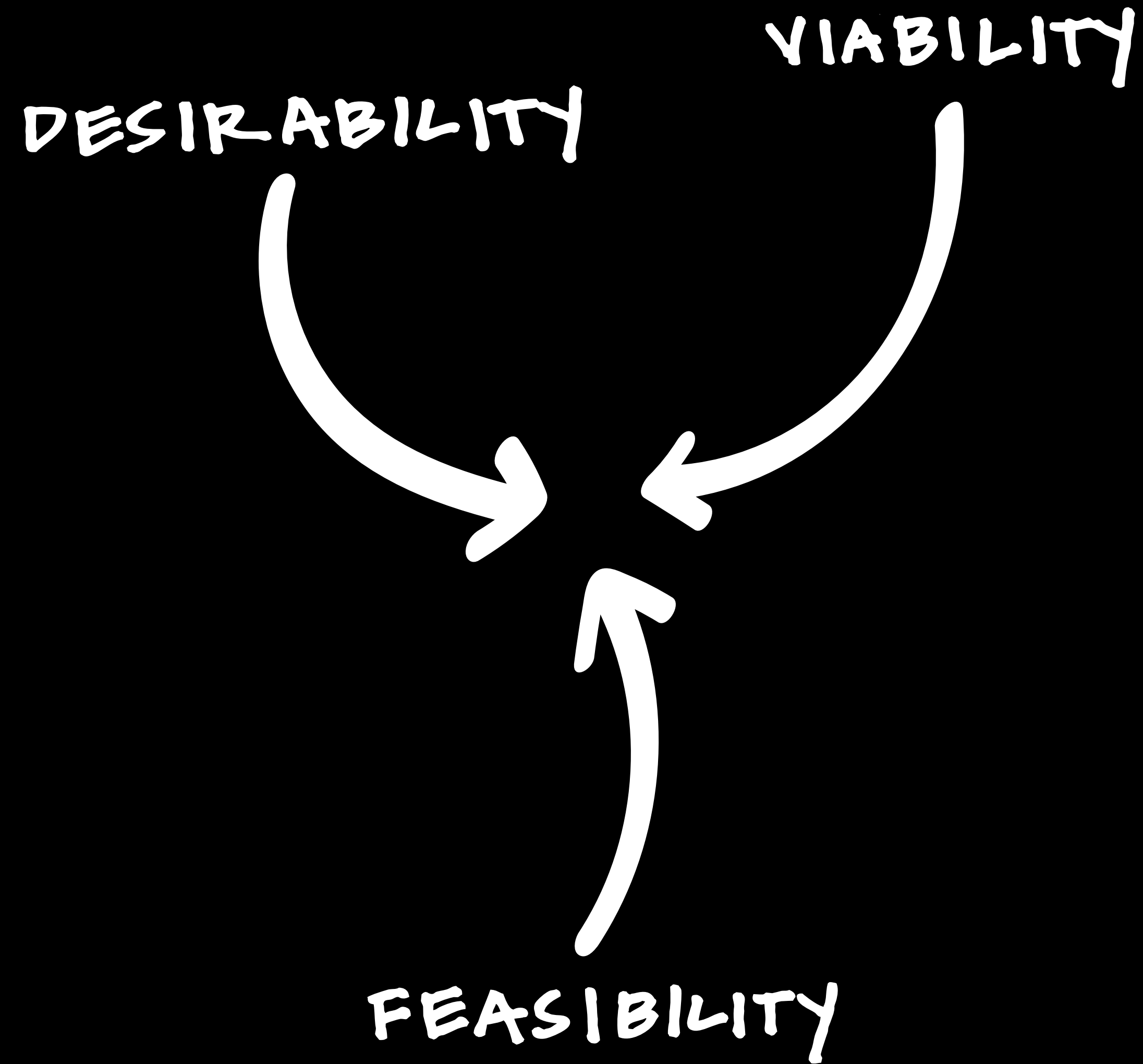
FEASIBILITY
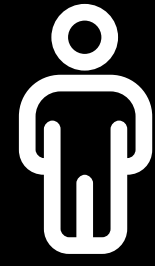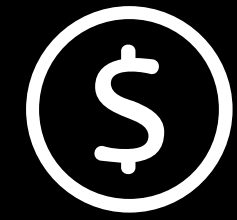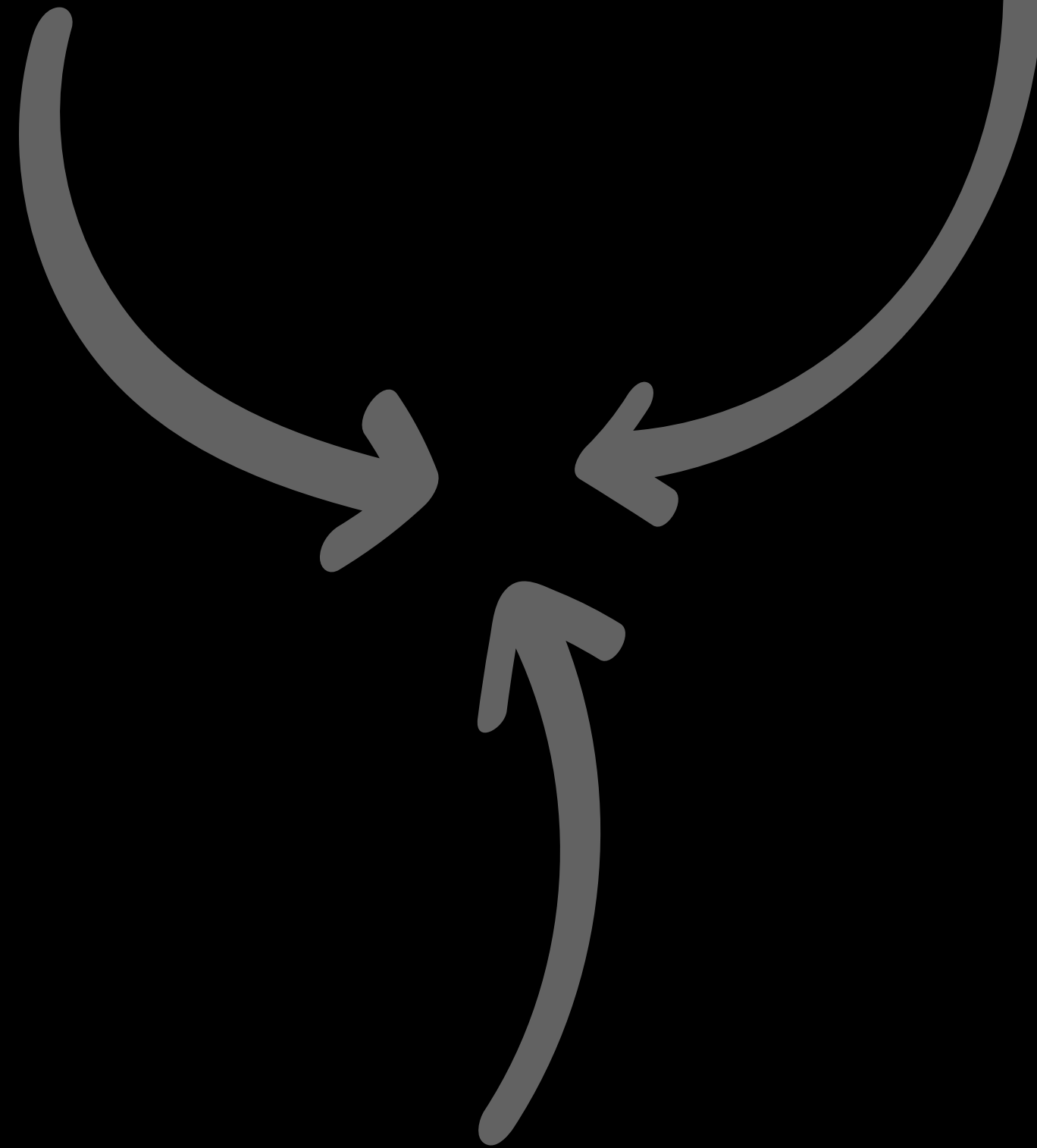
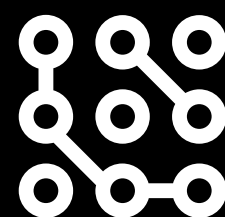*The intersection where design thinking lives*

IDEO

Does anyone want this?

Should we do this?

DESIRABILITY

VIABILITY

FEASIBILITY

Can we do this?

The Business Model Canvas

Designed for:

Designed by:

On:

Iteration:

Key Partners

Who are our Key Partners?
Who are our key suppliers?
Which Key Resources are we acquiring from partners?
Which Key Activities do partners perform?

MOTIVATIONS FOR PARTNERSHIPS:
Optimization and economy
Reduction of risk and uncertainty
Acquisition of particular resources and activities

Key Activities

What Key Activities do our Value Propositions require?
Our Distribution Channels?
Customer Relationships?
Revenue streams?

CATEGORIES
Production
Problem Solving
Platform/Network

Key Resources

What Key Resources do our Value Propositions require?
Our Distribution Channels? Customer Relationships?
Revenue Streams?

TYPE OF RESOURCES
Physical
Intellectual (brand patents, copyrights, data)
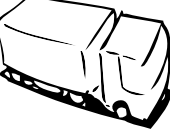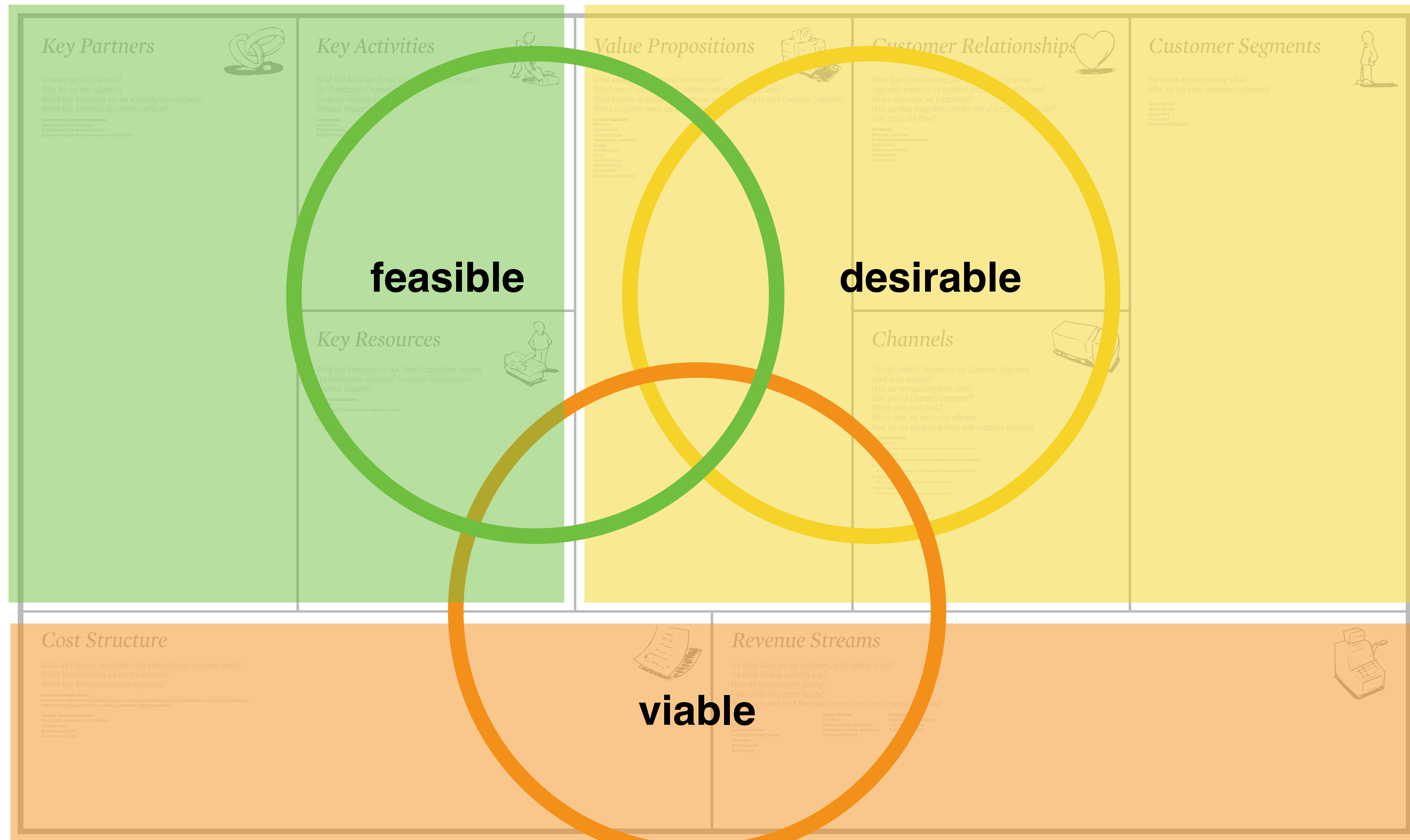*Human*
Financial

Value Propositions

What value do we deliver to the customer?
Which one of our customer's problems are we helping to solve?
What bundles of products and services are we offering to each Customer Segment?
Which customer needs are we satisfying?

CHARACTERISTICS
Newness
Performance
Customization
"Getting the Job Done"
Design
Brand/Status
Price
Cost Reduction
Risk Reduction
Accessibility
Convenience/Usability

Customer Relationships

What type of relationship does each of our Customer Segments expect us to establish and maintain with them?
Which ones have we established?
How are they integrated with the rest of our business model?
How costly are they?

EXAMPLES
Personal assistance
Dedicated Personal Assistance
Self-Service
Automated Services
Communities
Co-creation

Channels

Through which Channels do our Customer Segments want to be reached?
How are we reaching them now?
How are our Channels integrated?
Which ones work best?
Which ones are most cost-efficient?
How are we integrating them with customer routines?

CHANNEL PHASES
1. Awareness
How do we raise awareness about our company's products and services?
2. Evaluation
How do we help customers evaluate our organization's Value Proposition?
3. Purchase
How do we allow customers to purchase specific products and services?
4. Delivery
How do we deliver a Value Proposition to customers?
5. After sales
How do we provide post-purchase customer support?

Customer Segments

For whom are we creating value?
Who are our most important customers?

Mass Market
Niche Market
Segmented
Diversified
Multi-sided Platform

Cost Structure

What are the most important costs inherent in our business model?
Which Key Resources are most expensive?
Which Key Activities are most expensive?

IS YOUR BUSINESS MORE:
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)
Value Driven (focused on value creation, premium value propositions)

SAMPLE CHARACTERISTICS:
Fixed Costs (salaries, rents, utilities)
Variable costs
Economies of scale
Economies of scope

Revenue Streams

For what value are our customers really willing to pay?
For what do they currently pay?
How are they currently paying?
How would they prefer to pay?
How much does each Revenue Stream contribute to overall revenues?

TYPES:
Asset sale
Usage fee
Subscription Fees
Lending/Renting/Leasing
Licensing
Brokerage fees
Advertising

FIXED PRICING
List Price
Product feature dependent
Customer segment dependent
Volume dependent

DYNAMIC PRICING
Negotiation(bargaining)
Yield Management
Real-time-Market

https://www.strategyzer.com/

feasible

desirable

viable

Key Partners

Key Activities

Key Resources

Value Propositions

Customer Relationships

Customer Segments

Channels

Cost Structure

Revenue Streams

Hypothesis
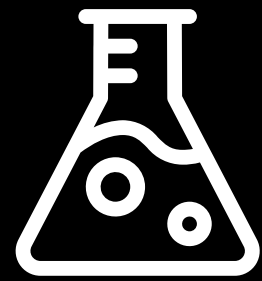
„Hypotheses are instruments you can use to **prove** or **refute** your **assumptions.**
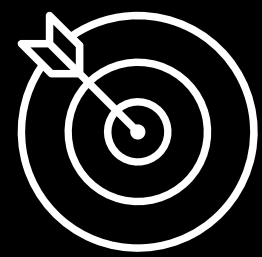
Charakteristica of a good Hypothesis

Testable

Your hypothesis is testable when it can be shown true (validated) or false (invalidated), based on evidence (and guided by experience).

Precise

Your hypothesis is precise when you know what success looks like. Ideally, it describes the precise what, who, and when of your assumptions.

Discrete

Your hypothesis is discrete when it describes only one distinct, testable, and precise thing you want to investigate.

For **{customer segment}**, we believe that **{outcome}** will happen when we run **{experiment description}**

Testing

Formulate a Hypothesis via a Testing Card

Test Card

Strategyzer

| Test Name | Deadline |
| Assigned to | Duration |

STEP 1: HYPOTHESIS

We believe that

Critical:

⚠ ⚠ ⚠

STEP 2: TEST

To verify that, we will

Test Cost: Data Reliability:
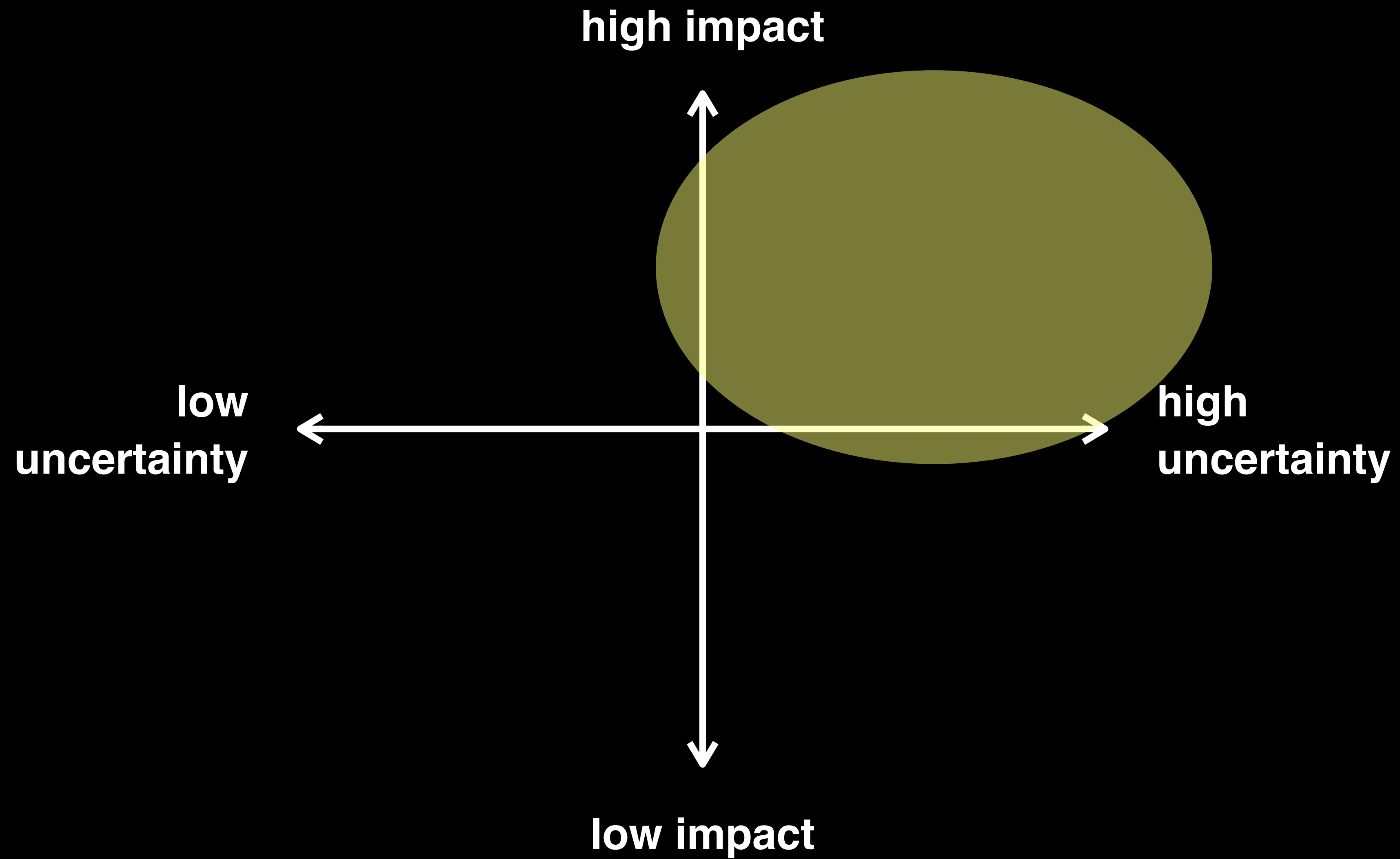
STEP 3: METRIC

And measure

Time Required:

STEP 4: CRITERIA

We are right if

Copyright Strategyzer AG   *The makers of Business Model Generation and Strategyzer*

Prioritize Hypotheses

high impact

low
uncertainty

high
uncertainty

low impact

Testing

Syntheses via Testing Cards

Learning Card ☺ Strategyzer

Insight Name

Date of Learning

Person Responsible

STEP 1: HYPOTHESIS

We believed that

STEP 2: OBSERVATION

We observed

Data Reliability:
👍 👍 👍

STEP 3: LEARNINGS AND INSIGHTS

From that we learned that

Action Required:
☑ ☑ ☑

STEP 4: DECISIONS AND ACTIONS
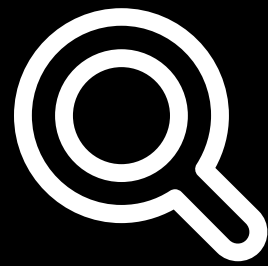
Therefore, we will

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Archetypes of Experiments

Experimente

Typen von Experimenten

Discovery Experiments

Exploration

Data Analysis

Interest Discovery

Discovery

Discussion Prototypes

Preference & Prioritization Discovery
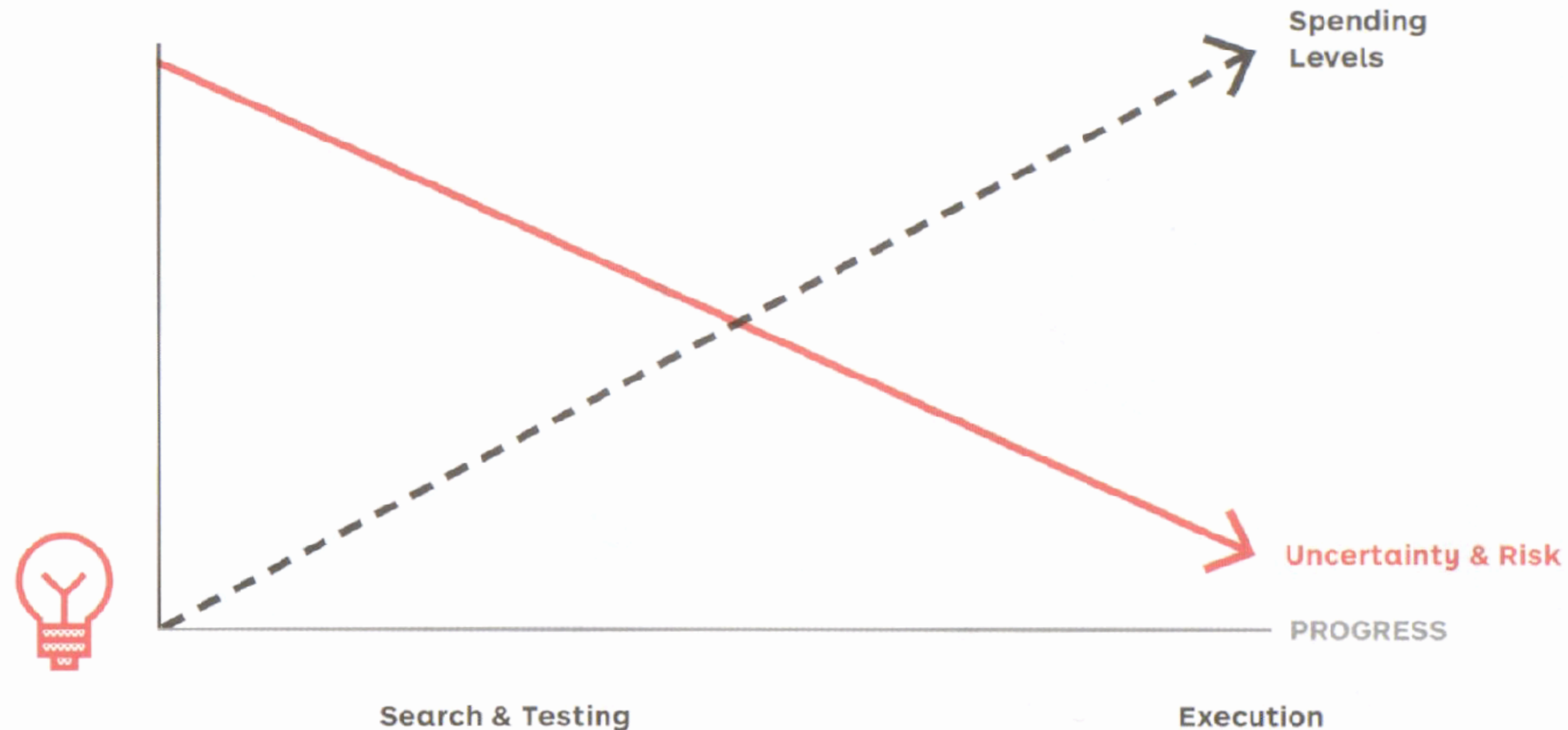

Validation Experiments

Interaction Prototypes

Call to Action

Simulation

Choice of Experiment

Spending Levels

Uncertainty & Risk

PROGRESS

Search & Testing

Execution

Discovery
Weak evidence is sufficient to discover if your general direction is right. You get first insights into your most important hypotheses.
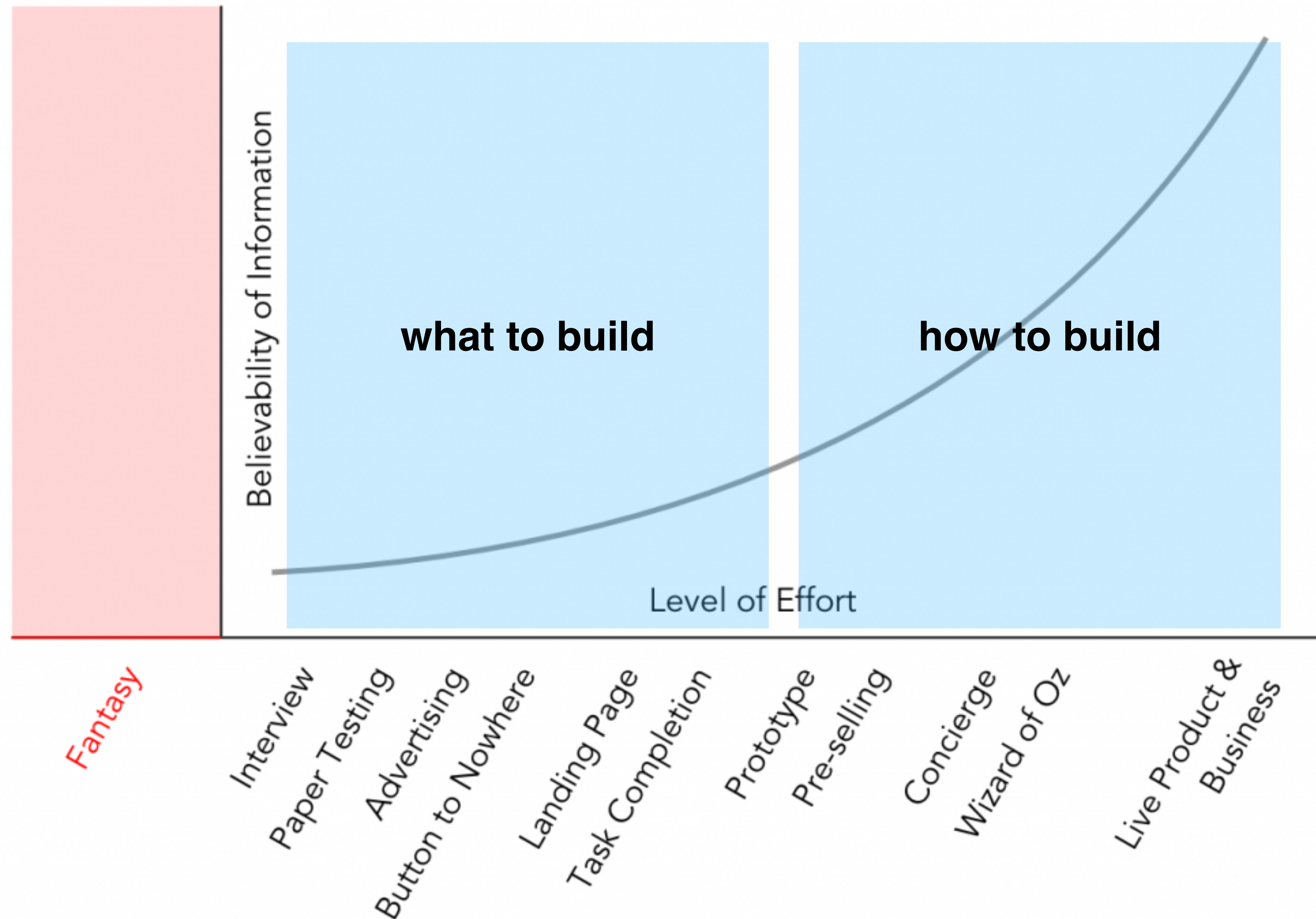
Validation
Strong evidence is required to validate the direction you've taken. You aim to confirm the insights you've gotten for your most important hypotheses.

vgl.: Testing Business Ideas, D. Bland; A. Osterwalder; 2020

Experiments

„Truth Curve"

what to build

how to build

Believability of Information

Level of Effort

Fantasy

Interview

Paper Testing

Advertising

Button to Nowhere

Landing Page

Task Completion

Prototype

Pre-selling

Concierge

Wizard of Oz

Live Product & Business

Discovery Experiments

Examples

Discovery Experiments

TYPE	EXPERIMENT
Exploration	Customer Interview p. 106
	Expert Stakeholder Interviews p. 115
	Partner & Supplier Interviews p. 114
	A Day in the Life p. 116
	Discovery Survey p. 122
Data Analysis	Search Trend Analysis p. 126
	Web Traffic Analysis p. 130
	Discussion Forums p. 134
	Sales Force Feedback p. 138
	Customer Support Analysis p. 142
Interest Discovery	Online Ad p. 146
	Link Tracking p. 152
	404 Test p. 160
	Feature Stub p. 156
	Email Campaign p. 162
	Social Media Campaign p. 168
	Referral Program p. 172
Discussion Prototypes	3D Print p. 176
	Paper Prototype p. 182
	Storyboard p. 186
	Data Sheet p. 190
	Brochure p. 194
	Explainer Video p. 200
	Boomerang p. 204
	Pretend to Own p. 208
Preference & Prioritization Discovery	Product Box p. 214
	Speed Boat p. 218
	Card Sorting p. 222
	Buy a Feature p. 226

Discovery Experiments >

DISCOVERY / INTEREST DISCOVERY

Online Ad

An online advertisement that clearly articulates a value proposition for a targeted customer segment with a simple call to action.

●●●○○ COST	●●●○○ EVIDENCE STRENGTH
●●○○○ SETUP TIME	●●●○○ RUN TIME

DESIRABILITY · FEASIBILITY · VIABILITY

Online ads are ideal for quickly testing your value proposition at scale with customers online.

CAPABILITIES *Design / Product / Marketing*

Experiments

Discovery Experiments >

Experiments

Discovery Experiments >

DISCOVERY / INTEREST DISCOVERY

Feature Stub

A small test of an upcoming feature that includes the very beginning of the experience, usually in the form of a button.

COST ●○○○○

EVIDENCE STRENGTH ●●●◐○

SETUP TIME ●●○○○

RUN TIME ●●○○○

DESIRABILITY · FEASIBILITY · VIABILITY

Feature Stub is ideal for rapidly testing the desirability of a new feature of an already existing offering.

Feature Stub is not ideal for testing mission critical functionality for your product.

CAPABILITIES *Design / Product / Technology*

Experiments

Discovery Experiments >

https://medium.com/@kishfy/button-to-nowhere-77d911517318

Experiments

Discovery Experiments >

Discussion Prototypes

DISCOVERY / DISCUSSION PROTOTYPES

3D Print

Rapidly prototyping a physical object from a three-dimensional digital model by using a 3D printer.

COST ●●●○○		EVIDENCE STRENGTH ●●○○○	
SETUP TIME ●●●○○		RUN TIME ●●●○○	

CAPABILITIES Design / Technology

DESIRABILITY · FEASIBILITY · VIABILITY

3D print is ideal for rapidly testing iterations of your physical solution with customers.

Experiments

Discovery Experiments >

Exploration

Data Analysis

Interest Discovery

Discovery

Discussion Prototypes

Preference & Prioritization Discovery

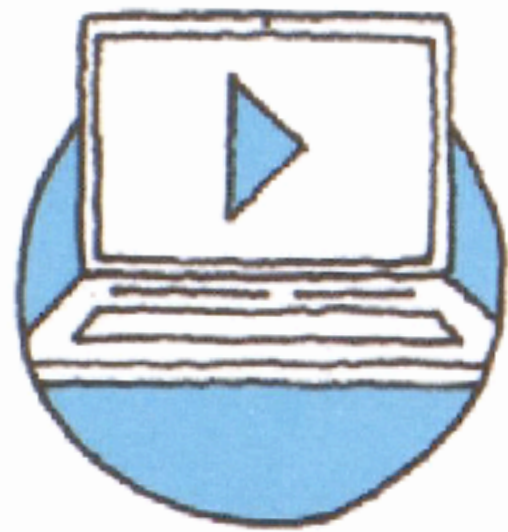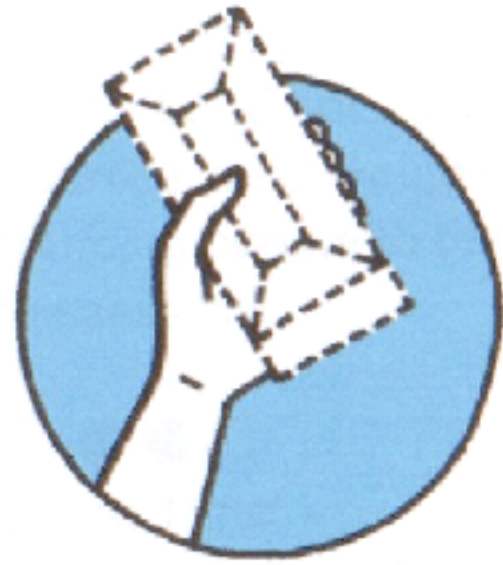Scanner nehme

Experiments

Discovery Experiments >

DISCOVERY / DISCUSSION PROTOTYPES

Explainer Video

A short video that focuses on explaining a business idea in a simple, engaging, and compelling way.

●●●○○ COST	●●●○○ EVIDENCE STRENGTH	DESIRABILITY · FEASIBILITY · VIABILITY
●●●○○ SETUP TIME	●●●●○ RUN TIME	An Explainer Video is ideal for quickly explaining your value proposition at scale with customers.

CAPABILITIES *Design / Product / Technology*

Experiments

Discovery Experiments >

https://youtu.be/w4eTR7tci6A
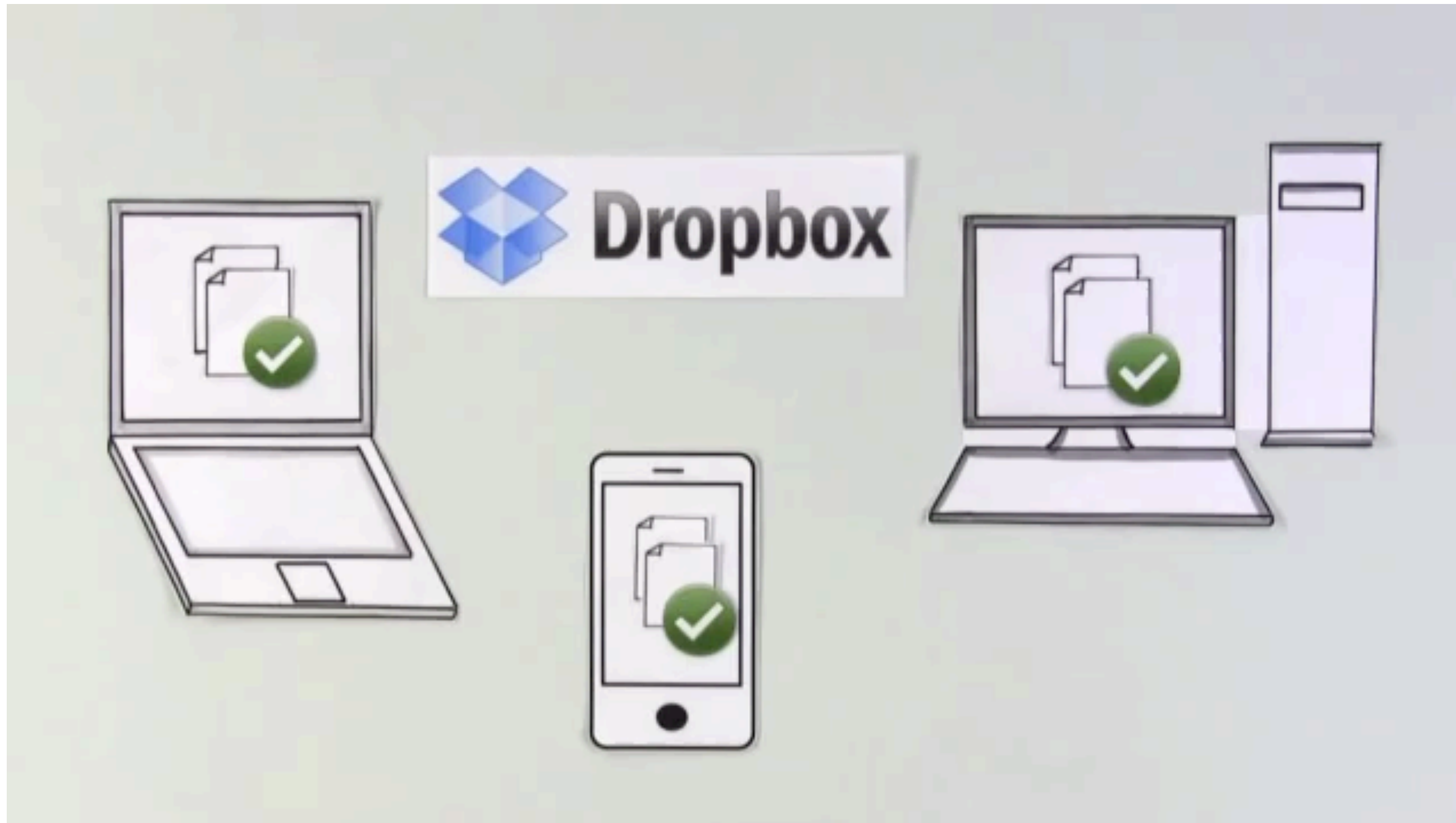
Experiments

Discovery Experiments >

DISCOVERY / INTERACTION PROTOTYPE

Pretend to Own

Creating a nonfunctioning, low fidelity prototype of the solution to determine whether it fits into the day-to-day life of the customer. Sometimes called a Pinocchio experiment.

COST

EVIDENCE STRENGTH

SETUP TIME

RUN TIME

DESIRABILITY · FEASIBILITY · VIABILITY

Pretend to Own is ideal for generating your own evidence on the potential usefulness of an idea.

CAPABILITIES Design / Research

Testing Business Ideas, D. Bland; A. Osterwalder; 2020

Experiments

Discovery Experiments >   **Discussion Prototypes**

Validation Experiments

Examples

Validation Experiments

TYPE	EXPERIMENT
Interaction Prototypes	Clickable Prototype *p. 236*
	Single Feature MVP *p. 240*
	Mash-Up *p. 244*
	Concierge *p. 248*
	Life-Sized Prototype *p. 254*
Call to Action	Simple Landing Page *p. 260*
	Crowdfunding *p. 266*
	Split Test *p. 270*
	Presale *p. 274*
	Validation Survey *p. 278*
Simulation	Wizard of Oz *p. 284*
	Mock Sale *p. 288*
	Letter of Intent *p. 294*
	Pop-Up Store *p. 300*
	Extreme Programming Spike *p. 306*

Validation Experiments >   **Interaction Prototypes**

Call to Action

Simulation

DISCOVERY / INTERACTION PROTOTYPE

Clickable Prototype

Digital interface representation with clickable zones to simulate the software's reactions to customer interaction.

COST	EVIDENCE STRENGTH
●●○○○	●●○○○

SETUP TIME	RUN TIME
●●○○○	●●○○○

CAPABILITIES *Design / Product / Technology / Research*

DESIRABILITY · FEASIBILITY · VIABILITY

Clickable prototype is ideal for rapidly testing the concept of your product quickly with customers at a higher fidelity than paper.

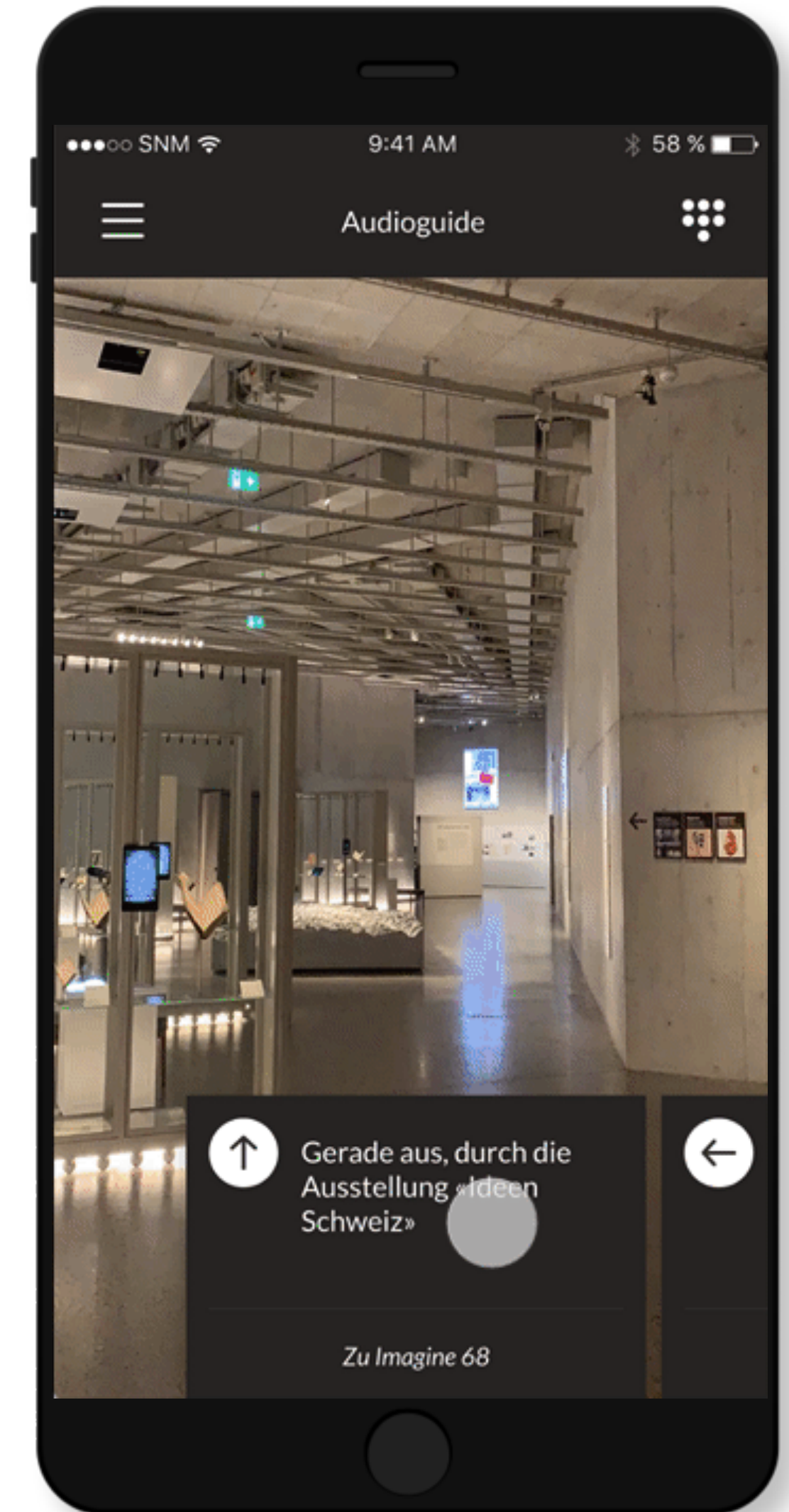*Clickable prototype is not ideal as a replacement for proper usability with customers.*
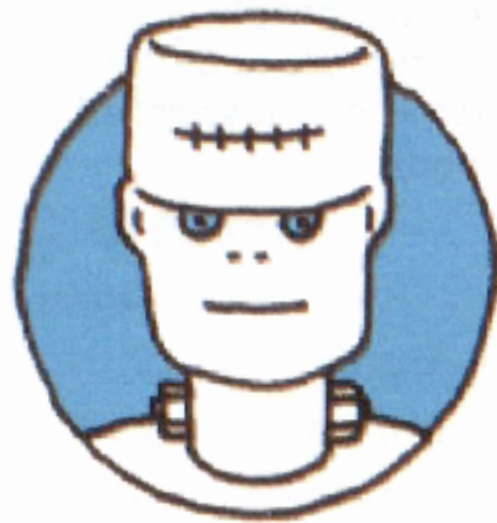
Experiments

Validation Experiments >

Interaction Prototypes

Call to Action

Simulation

Validation Experiments >

Interaction Prototypes

Call to Action

Simulation

DISCOVERY / INTERACTION PROTOTYPE

Mash-Up

A functioning minimum viable product that consists of combining
multiple existing services to deliver value.

COST	EVIDENCE STRENGTH
●●●○○	●●●●●

DESIRABILITY · FEASIBILITY · VIABILITY

SETUP TIME	RUN TIME
●●●○○	●●●●○

Mash-Up is ideal for learning if the solution resonates
with customers.

CAPABILITIES Design / Product / Tech / Legal / Marketing / Finance

Validation Experiments > Interaction Prototypes
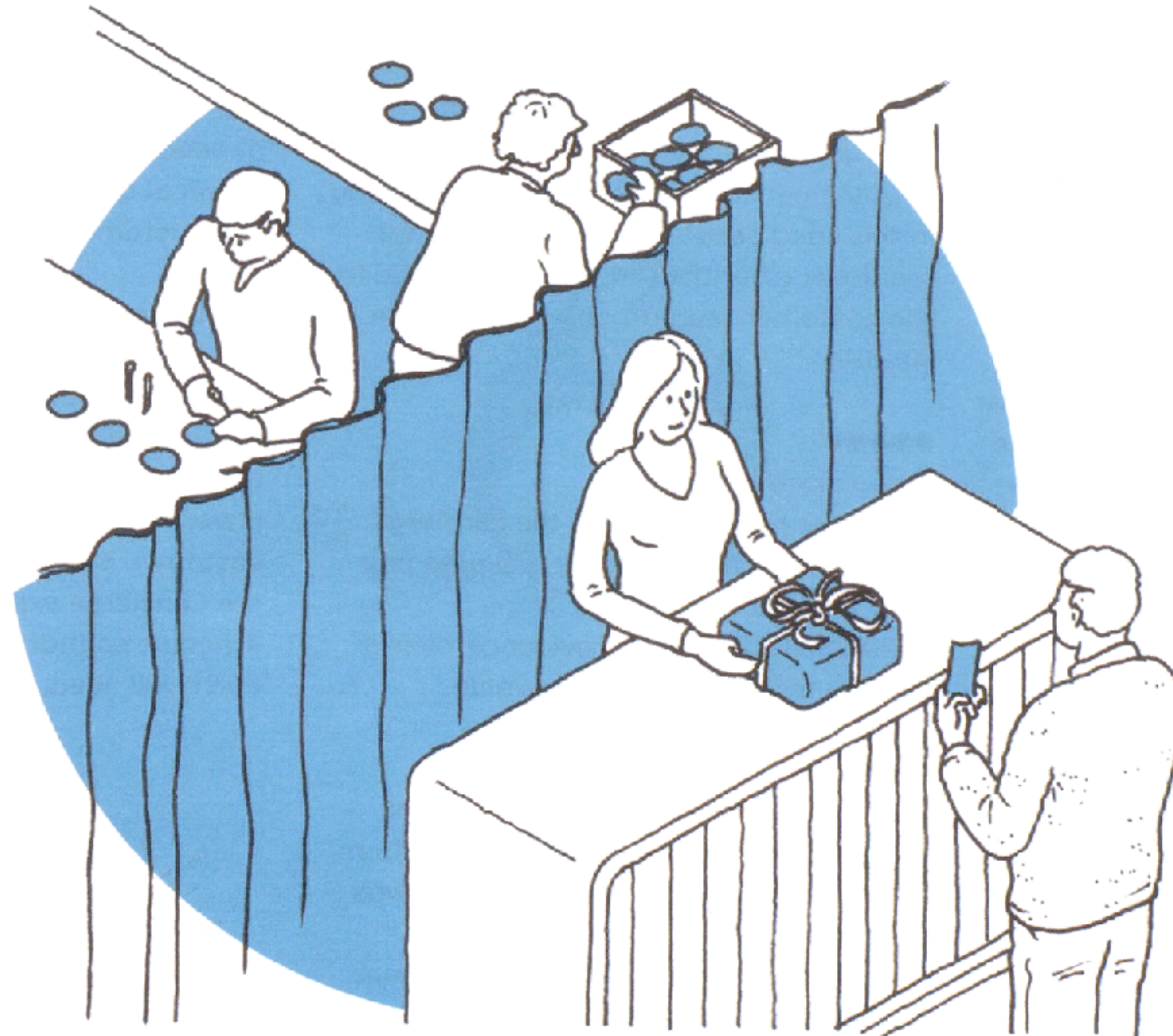
Call to Action

Simulation

DISCOVERY / INTERACTION PROTOTYPE

Concierge

Creating a customer experience and delivering value manually, with people instead of using technology. Unlike Wizard of Oz, the people involved are obvious to the customer.

COST		EVIDENCE STRENGTH	
● ○ ○ ○ ○		● ● ● ● ●	

SETUP TIME		RUN TIME	
● ● ○ ○ ○		● ● ● ○ ○	

CAPABILITIES Design / Product / Technology / Legal / Marketing

DESIRABILITY · FEASIBILITY · VIABILITY

Concierge is ideal for learning firsthand about steps needed to create, capture, and deliver value to a customer.

Concierge is not ideal for scaling a product or business.

Validation Experiments > Interaction Prototypes

Call to Action

Simulation

Validation Experiments >   Interaction Prototypes

                        Call to Action

                        Simulation

VALIDATION / CALL TO ACTION

Simple Landing Page

A simple, digital web page that clearly illustrates your
Value Proposition with a call to action.

COST ● ● ○ ○ ○	EVIDENCE STRENGTH ● ● ○ ○ ○	DESIRABILITY · FEASIBILITY · VIABILITY
SETUP TIME ● ● ○ ○ ○	RUN TIME ● ● ● ○ ○	A simple landing page is ideal for determining if your Value Proposition resonates with your customer segment.
CAPABILITIES Design / Product / Technology		

Interaction Prototypes

Call to Action

Validation Experiments >   Simulation

VALIDATION / SIMULATION

Wizard of Oz

Creating a customer experience and delivering value manually, with people instead of solely using technology. The name Wizard of Oz is derived from the movie, where you have a request that is handled by a person. Unlike Concierge, the people involved aren't visible to the customer.

COST	EVIDENCE STRENGTH	DESIRABILITY · FEASIBILITY · VIABILITY
●●○○○	●●●●●	Wizard of Oz is ideal for learning manually, firsthand about steps needed to create, capture, and deliver value to a customer.
SETUP TIME ●●●○○	RUN TIME ●●●○○	Wizard of Oz is not ideal for scaling a product or business.

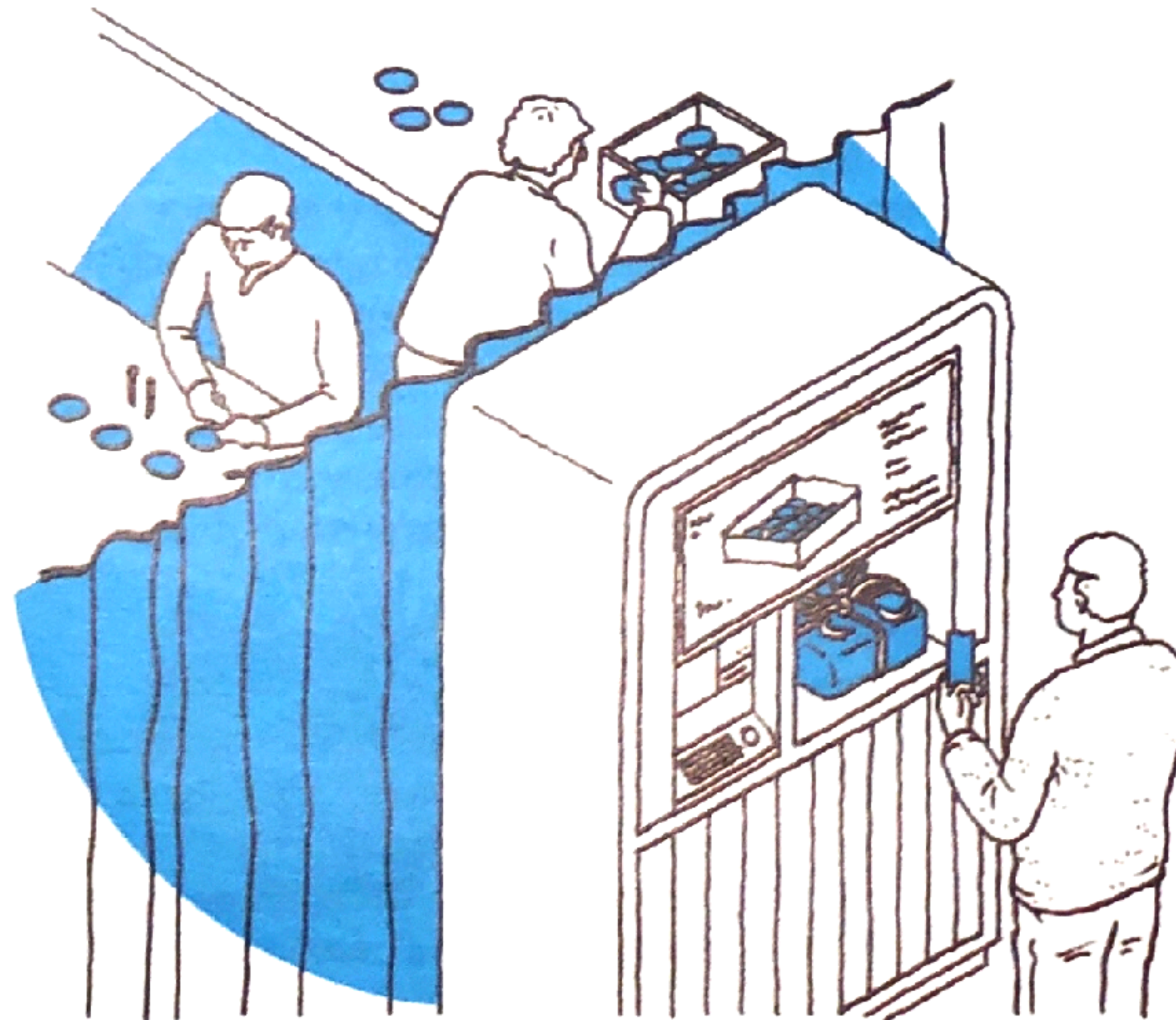CAPABILITIES *Design / Product / Technology / Legal / Marketing*

Interaction Prototypes

Call to Action

Validation Experiments > Simulation

40

Interaction Prototypes

Call to Action

Interaction Prototypes

Call to Action

Validation Experiments > **Simulation**

VALIDATION / SIMULATION

Pop-Up Store

A retail store that is opened temporarily to sell goods, usually a trendy or seasonal product.

COST	EVIDENCE STRENGTH	DESIRABILITY · FEASIBILITY · VIABILITY
●●●●○	●●○○○	A pop-up store is ideal for testing face-to-face interactions with customers to see if they'll really make a purchase.
SETUP TIME ●●●○○	RUN TIME ●●○○○	A pop-up store is not ideal for B2B businesses: consider a booth at a conference instead.

CAPABILITIES Design / Product / Legal / Sales / Marketing

Interaction Prototypes

Call to Action

Validation Experiments >   **Simulation**

„don't be evil"

Experiments should minimize the risk in the development of business ideas and not annoy or deceive customers.

Anatomy of an Experiment

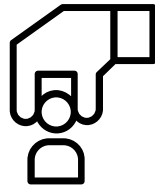**Anatomie eines Experiments**

Template

		Experiment
	Wir glauben dass...	
	Um das zu überprüfen werden wir...	
	und messen...	
	Wir liegen richtig wenn...	
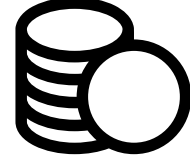
Anatomie eines Experiments

Template

	Wer ist das Zielpublikum für unser Experiment?	
	Wieviele Teilnehmenden brauchen wir?	
	Wie rekrutieren wir unsere Teilnehmenden?	
	Wie lange läuft unser Experiment?	
	Welche anderen qualitativen Erkenntnisse aus diesen Experiment ziehen?	

Anatomie eines Experiments

Template

	Aufwand / Kosten	● ○ ○ ○ ○
	Beweiskraft (wie belastbar sind die Erkenntnisse)	● ○ ○ ○ ○
	Risiken	● ○ ○ ○ ○

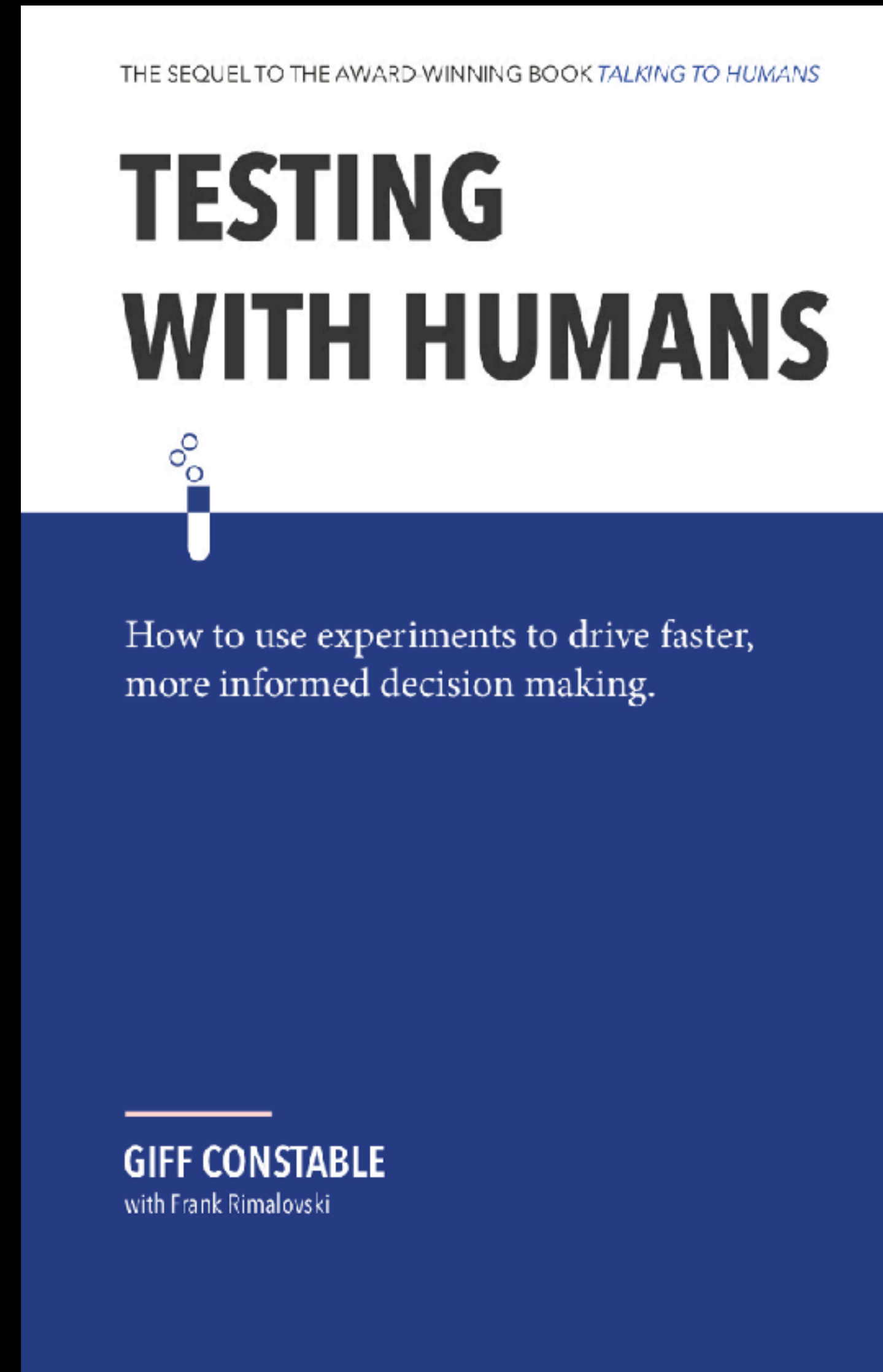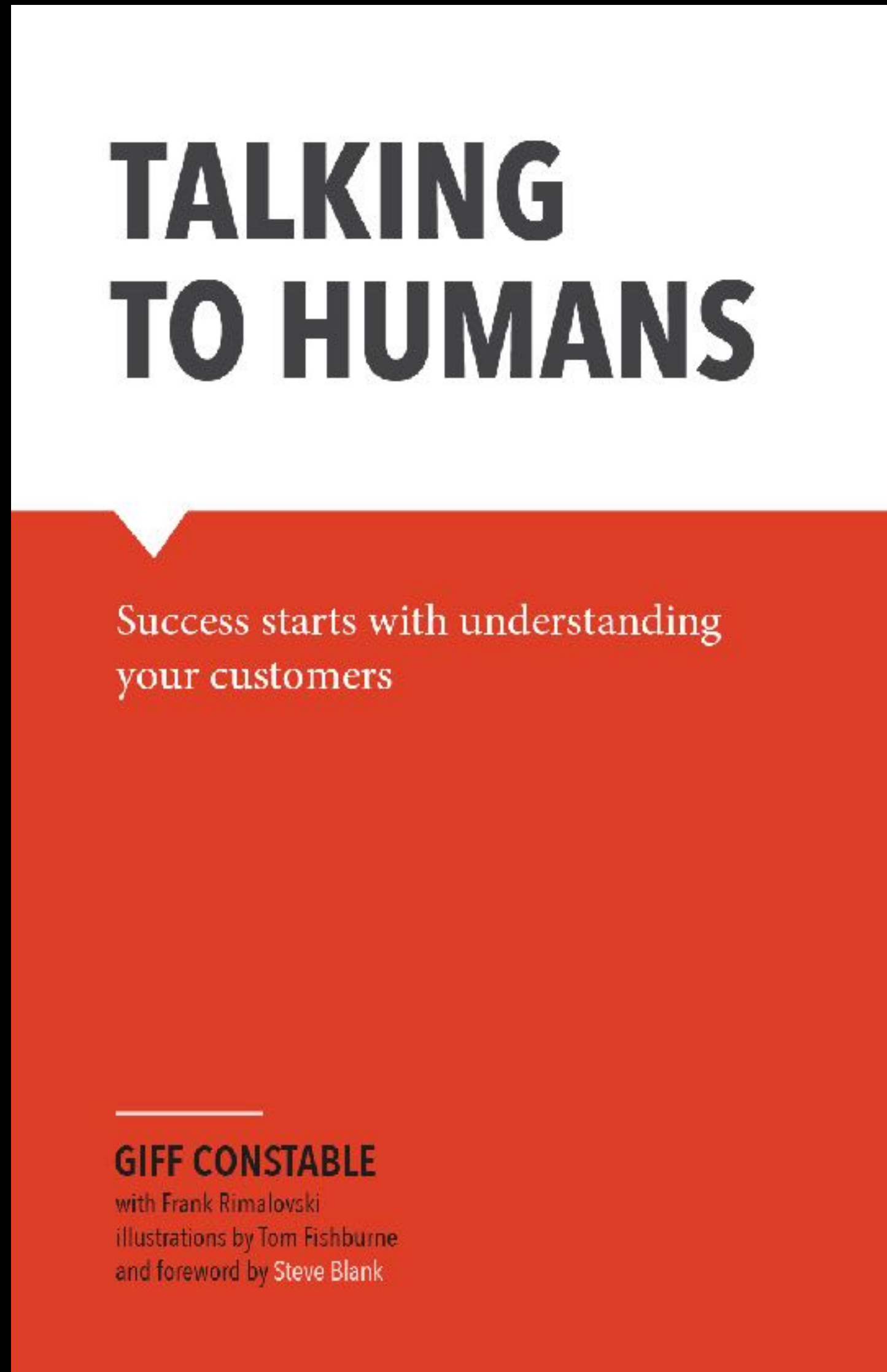# David J. Bland & Alex Osterwalder
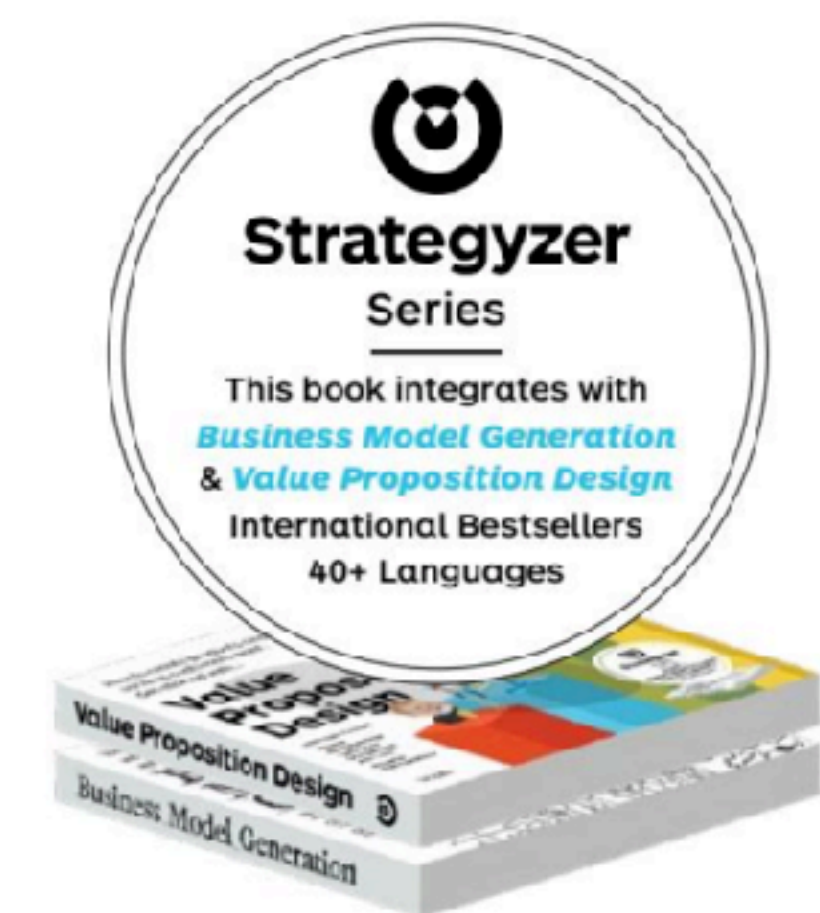
Buchtipp

Jeff Gothelf & Josh Seiden
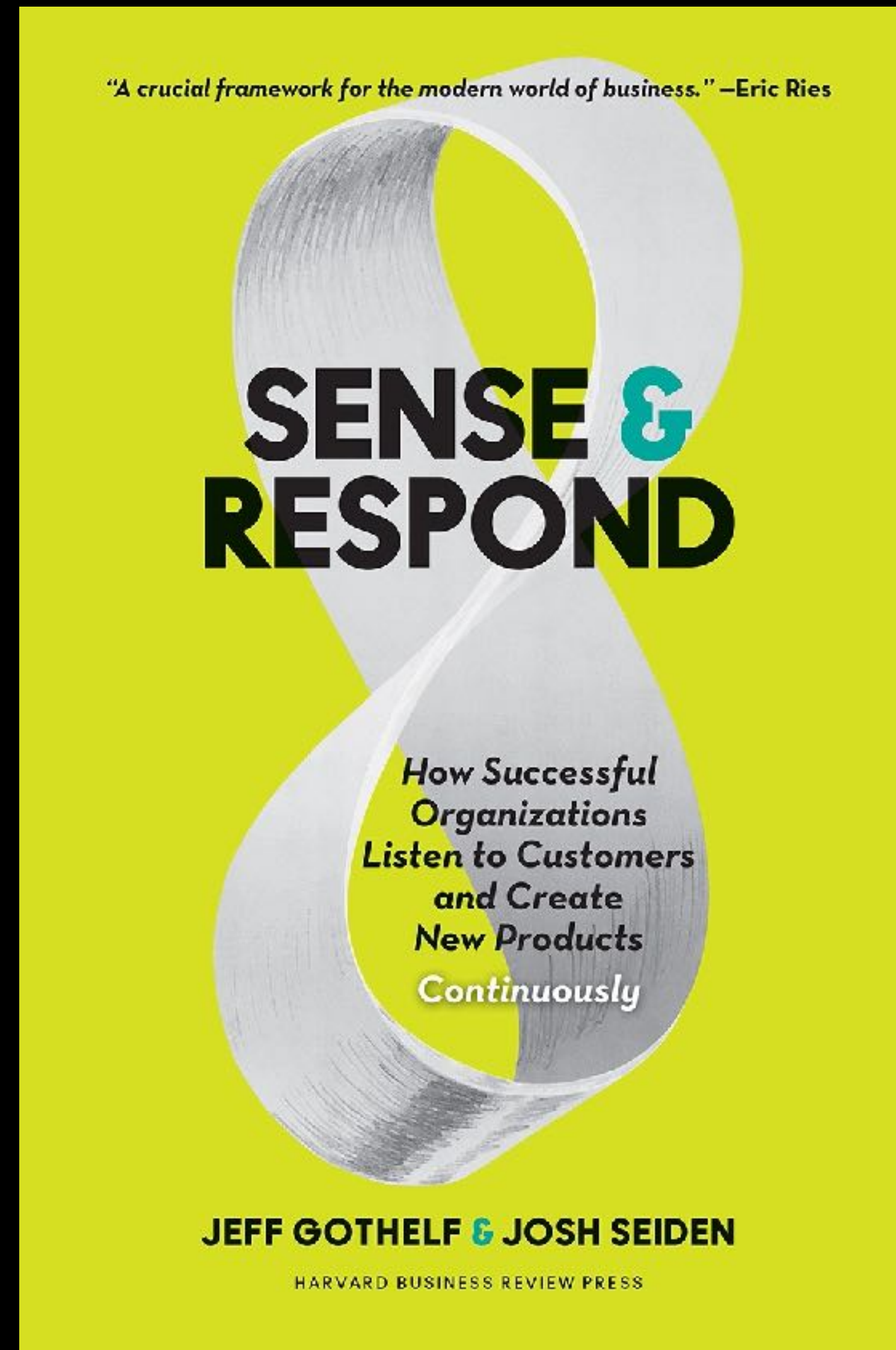
Buchtipp

Giff Constable

Thank you!

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Z — **hdk**
—
Zürcher Hochschule der Künste
Bachelor of Arts in Design